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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,853

02/25/2005

Karl-Fritz Heinzelmann

ZAHFRI P 727US

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20210 7590 04/23/2007  
DAVIS & BUJOLD, P.L.L.C.  
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CONCORD, NH 03301

EXAMINER

PANG, ROGER L

ART UNIT

PAPER NUMBER

3681

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/525,853

Applicant(s)

HEINZELMANN, KARL-FRITZ

Examiner

Roger L. Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following action is in response to the RCE filed for application 10/525,853 on March 22, 2007.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 9 and 15, when applicant is claims "only" certain elements are rotating during the direct drive gear, applicant must include everything that is rotating (which would have to include the associated shift elements). Therefore, the cancellation of this limitation would be improper.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frost ' 959 in view of Anthony '322. Frost teaches a transmission 20 for a motor vehicle, and an area group 22 being arranged downstream of the transmission, the area group having an area group input shaft 24 and an area group output shaft 26 and an area group direct gear for directly connecting the

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area group input shaft to the area group output shaft (via 82); when the area group direct gear directly connects the area group input shaft to the area group output shaft, wherein the power flow path in the direct gear state through the area group consists essentially of the coupled area group input shaft and the area group output shaft to as to minimize friction losses within the area group (High-Range). Frost lacks the teaching of the specifics of the transmission. Anthony teaches a transmission having a transmission input shaft 1, a transmission output shaft 2, and at least one countershaft 3, the transmission input shaft, the transmission output shaft, and the at least one countershaft each supporting at least one gear (Fig. 1), the transmission having a transmission direct gear for directly coupling the transmission input shaft with the transmission output shaft (via 20); wherein when the transmission direct gear couples the transmission input shaft to the transmission output shaft, wherein the power flow path in the direct gear state through the transmission consists essentially of the coupled transmission input shaft and transmission output shaft to as to minimize friction losses within the transmission and the area group. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Frost to employ the transmission in view of Anthony in order to provide a transmission with noise and wear reduction (Abstract).

*Allowable Subject Matter*

Claims 9-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

With regard to claims 9 and 15, these claims would only be allowable if applicant clearly claimed what the respective shift elements of the transmission direct gear and the area group

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direct gear were. It is suggested that applicant introduce the limitations earlier within the respective claims (for example):

a direct gear shift element for the transmission, wherein the shift element is actuated in order to attain direct gear in the transmission;

a direct gear shift element for the area group, wherein the shift element is actuated in order to attain direct gear in the area group;

... “along with the direct gear shift element of both the transmission and the area group, rotate so as to...”

If applicant were to amend claims 9 and 15 to have these limitations, the claimed invention would be patentable over the previously cited art.

#### ***Response to Arguments***

With regard to the Frost and Anthony combination:

1) the combination is valid, since Frost teaches of a transfer case connected to a regular transmission. Anthony teaches of a regular transmission. The functionality of the combination would still be intact.

2) In claim 16, applicant only claims that the “power flow path” consists “essentially” of the input and output shafts of the transmission and the area group during direct gear. Since the applicant has only claimed the flow path, applicant does not need the shift elements here. However, the “flow path” is a much broader limitation. Given the direct gear of both Anthony and Frost, the “flow path” would be through the input and output shafts. The gears may still be meshing, but torque is not traveling through other shafts.

3) The limitation of “to minimize friction losses within the transmission and area group” is merely an inherent result of the claimed invention. Therefore, anything that teaches the claimed invention should inherently result in minimized friction losses.

Applicant’s arguments have been considered, but are not persuasive.

#### FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roger L Pang  
Primary Examiner  
Art Unit 3681

April 19, 2007